TAS 3562 C

T. H. 55
KIMBALL TO 3.5 MI. S.E.
OF JCT. T.H. 25 IN BUFFALO

S.P. 7316, 8606, 8607

AUGUST 1967

OFFICE OF
TRANSPORTATION SYSTEM PLANNING

MINNESOTA HIGHWAY DEPARTMENT

ADMIN 1000
80

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT HIGHWAY

TO : Paul G. Velz
Road Design Engineer

DATE: August 21, 1967

FROM : Robert D. Owens, Chief
Traffic Analysis Section

SUBJECT: T.H. 55, S.P. 7316, 8606, 8607; Kimball to 3.5 Mi. S.E. of Jct. T.H. 25 in Buffalo
TAS 3562C

The Traffic Analysis Section transmits this report in response to R. T. Peterson's requests of April 10, 1967 and April 21, 1967 for the 1990 ADT, DHV, and HCADT for the project location as shown on the map on page 2. E. V. Larson requested 1992 ADT, DHV, and HCADT for a portion of this project on April 10, 1967. To obtain 1992 ADT, a growth factor of 1.07 may be applied to the 1990 ADT for the entire project.

Estimated 1990 ADT volumes are shown on the maps on pages 3 and 4. For each segment numbered on these maps, the following data are tabulated on pages 5-8.

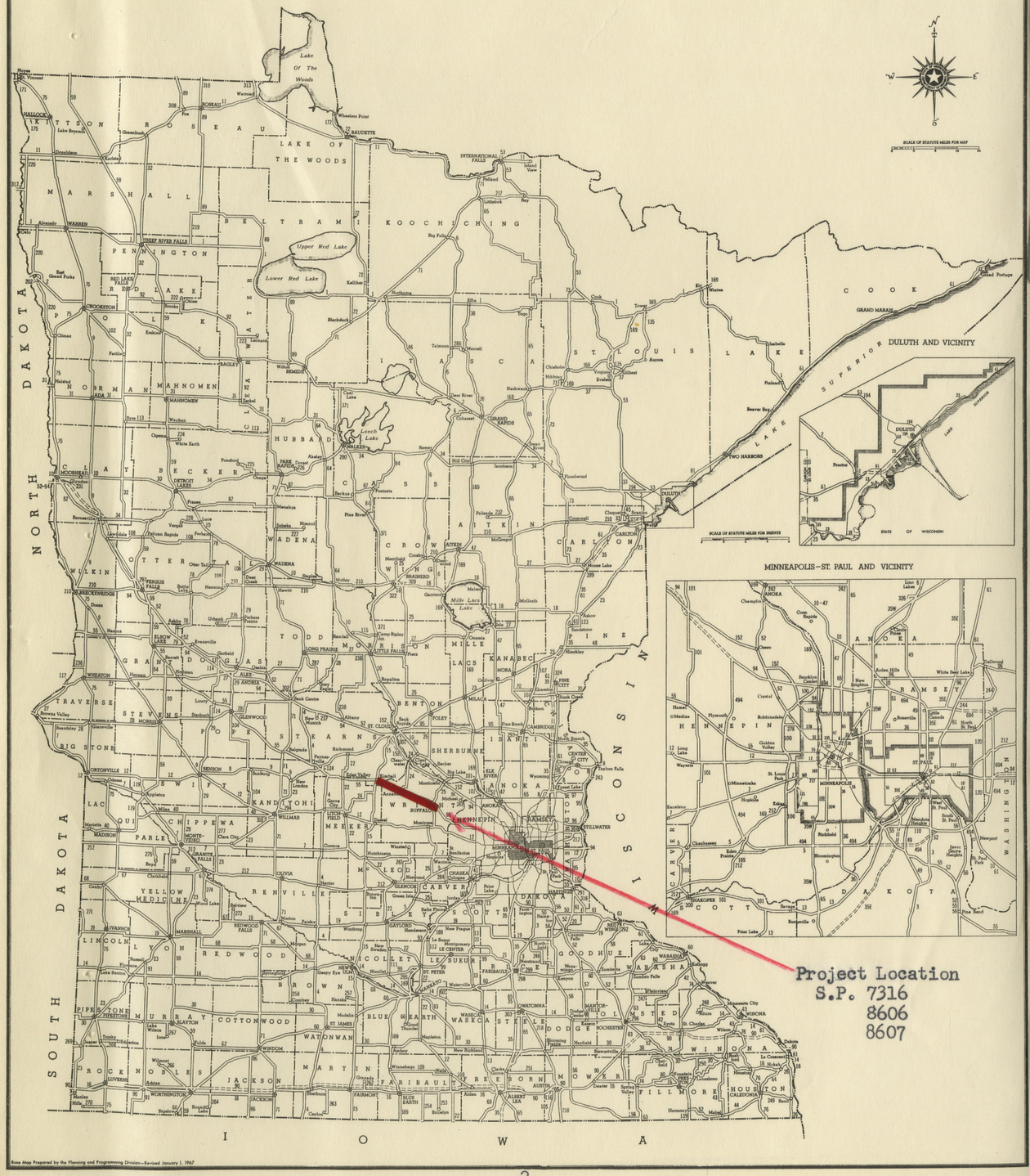
a) Total ADT
b) Vehicle Type Distribution
c) Total Heavy Commercial ADT
d) Total DHV Without Directional Distribution
e) Directional Distribution of DHV

Segment 39, with a 1990 ADT of 6650, has the highest ADT for any section in the project. The 1966 ADT of segment 39 is 3850.

The basic data, method and assumptions are on page 9.

WF

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP



Base Map Prepared by the Planning and Programming Division—Revised January 1, 1967

To Lake
PULASKI
C.R. 114

3RD AV. N.E.

4TH AV. N.E.

5TH AV. N.E.

6TH AV. N.E.

TO ST. MICHAEL
C.S.A.H. 35

Matthias

30
1980
CLOSE

33
1820

29
5000

230

250

32
5060

220

220

35
5110

W.B.
T.H. 55
E.B.

400

440

360

410

31
2340

34
2150

CLOSE

6TH AV. N.E.

PROP. CONST. BY OTHERS

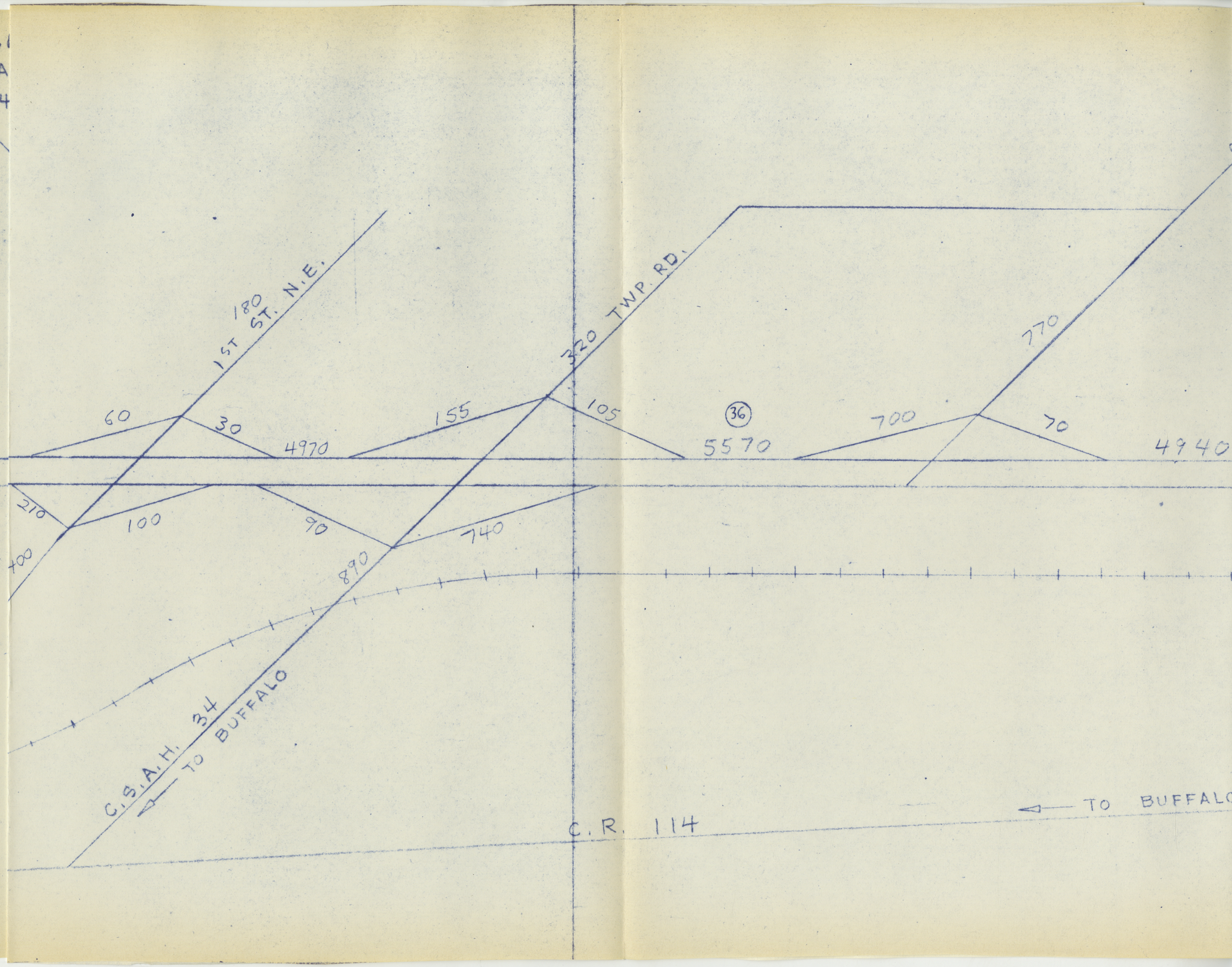
7TH ST. N.E.

C.S.A.H. 35

T.H. 25

BUFFALO

To Lak
PULA
C.R. 114



To La
PULA
C.R. 114

S.A.H. 34
TO HANOVER

N

AIRPORT

TWP. RD.

TO AIRPORT

70

0

70

37

5050

W. B

E. B

10

50

0

0

38

1500

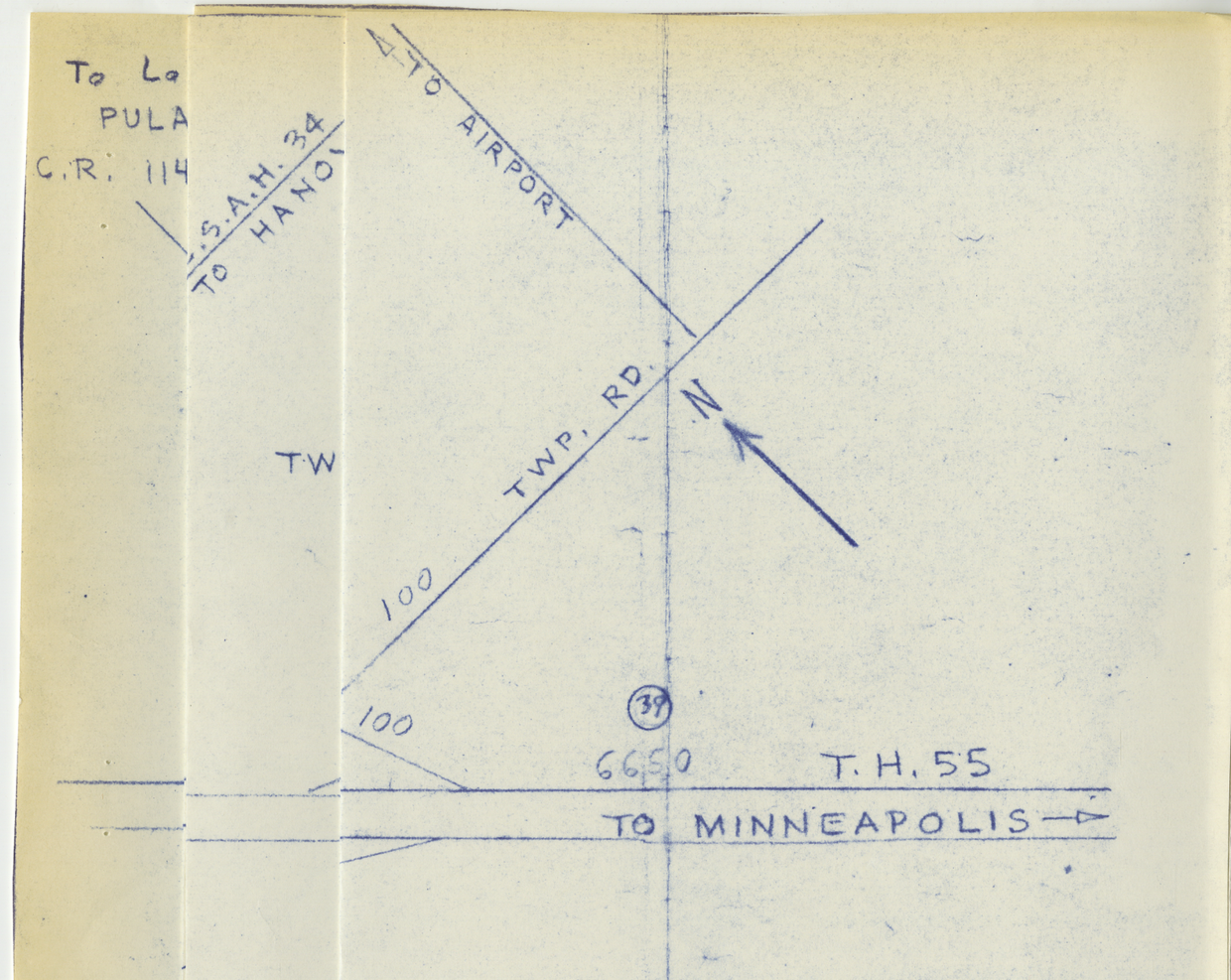
1500

38

500 LINE R.R.

60

C.R. 114



TAS 3562-C
August, 1967

TH 55
SP 7316, 8606, 8607
Kimball to 3.5 Mi. S.E.
of Jct. TH 25 in Buffalo

Legend

Segment Number ... (39)
1990 ADT 6650

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 1 OF 4

FOR

T.H. 55 S.P. 7316, 8606, 8607 LENGTH - MILES

COUNTY Wright, Stearns LOCATION Kimball to 3.5 Mi. S.E. of Jct. TH 25, in Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	2211	3050	2242	808	2549	2695	2668	2950	3420	3671	5551
1	157	79	58	21	66	169	167	184	212	222	323
2	46	79	58	21	66	58	57	63	73	78	112
3	25	3	2	1	2	25	25	25	26	26	26
4	28	10	7	3	8	30	30	31	33	33	38
5	86	49	36	13	41	94	94	95	99	100	111
6	27	10	7	3	8	29	29	32	37	40	69
TOTAL ADT	2580	3280	2410	870	2740	3100	3070	3380	3900	4170	6230
TOTAL H. COMM. ADT	369	230	168	62	191	405	402	430	480	499	679
TOTAL DHV	382	367	270	97	307	440	436	480	554	596	903
DIRECTIONAL DISTRIBUTION	60-40	65-35	65-35	65-35	65-35	60-40	60-40	60-40	65-35	65-35	65-35

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 2 OF 4

FOR

T.H. 55 S.P. 7316, 8606, 8607 LENGTH - MILES

COUNTY Wright, Stearns LOCATION Kimball to 3.5 Mi. S.E. of Jct. TH 25, in Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	4292	1984	1758	144	370	1064	3564	4301	4109	4064	4209
1	287	132	117	10	25	73	210	252	241	238	247
2	62	29	26	2	5	14	73	88	84	83	86
3	5	2	2	-	-	1	22	23	23	23	23
4	19	9	8	-	1	3	34	36	36	36	36
5	19	9	8	1	2	5	102	106	105	105	106
6	76	35	31	3	7	20	45	54	52	51	53
TOTAL ADT	4760	2200	1950	160	410	1180	4050	4860	4650	4600	4760
TOTAL H. COMM. ADT	468	216	192	16	40	116	486	559	541	536	551
TOTAL DHV	733	338	300	25	63	183	587	735	702	695	720
DIRECTIONAL DISTRIBUTION	60-40	60-40	60-40	60-40	60-40	60-40	65-35	65-35	65-35	65-35	65-35

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 3 OF 4

FOR

T.H. 55 S.P. 7316, 8606, 8607 LENGTH - MILES

COUNTY Wright, Stearns LOCATION Kimball to 3.5 Mi. S.E. of Jct. T.H. 25 in Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	23	24	25	26	27	28	29	30	31	32	33
0	115	742	1988	584	486	2517	4422	1823	2154	4477	1676
1	7	45	129	35	30	162	260	98	116	263	90
2	2	13	23	10	8	32	89	26	31	90	24
3	1	4	14	3	3	17	24	3	4	24	3
4	1	8	29	6	5	35	38	6	7	38	6
5	3	19	52	15	12	65	111	14	16	112	13
6	1	9	25	7	6	32	56	10	12	56	8
TOTAL ADT	130	840	2260	660	550	2860	5000	1980	2340	5060	1820
TOTAL H. COMM. ADT	15	98	272	76	64	343	578	157	186	583	144
TOTAL DHV	18	128	318	83	67	412	724	280	330	724	257
DIRECTIONAL DISTRIBUTION	60-40	60-40	55-45	60-40	60-40	55-45	65-35	55-45	55-45	65-35	55-45

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Form 2985 (9-63)

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 4 OF 4

FOR

T.H. 55 S.P. 7316, 8606, 8607 LENGTH - MILES

COUNTY Wright, Stearns LOCATION Kimball to 3.5 Mi. S.E. of Jct. T.H. 25 in Buffalo

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 39 AS DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER											
	34	35	36	37	38	39						
0	1980	4522	4944	4468	1446	6014						
1	106	266	288	260	28	290						
2	28	91	99	89	10	100						
3	4	24	24	24	1	25						
4	7	38	39	38	2	40						
5	15	112	114	112	4	116						
6	10	57	62	56	9	65						
TOTAL ADT	2150	5110	5570	5050	1500	6650						
TOTAL H. COMM. ADT	170	588	626	582	54	636						
TOTAL DHV	303	731	796	721	75	720						
DIRECTIONAL DISTRIBUTION	55-45	65-35	65-35	65-35	55-45	65-35						

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

BASIC DATA, METHOD, AND ASSUMPTIONS

The traffic volumes from CSAH 12 to 3.5 Mi. S.E. of Jct. T.H. 25 on T.H. 55 agree with those in TAS 3562B published in March, 1967. The 1990 traffic is based on least squares trends less diversions to the completed Interstate 94. The diversions to T.H. 94 are based on the 1966 Statewide Origin-Destination Study.

Alignment changes include: elimination of frontage road and ramps between CSAH 35 and 1st St. N.E., addition of access to 6th Ave. N.E. and CSAH 34 north of T.H. 55.

Other basic data were population trends from U.S. Bureau of Census and aerial photographs of Kimball, South Haven, Annandale, Maple Lake, and Buffalo. Turning movements at Kimball and Maple Lake aided in analysis.

Hourly volumes on the project were related to continuously operated traffic recorders on roads with travel similar to that of the project area. HCADT on the project excludes diversions by vehicle type to T.H. 94.